

Blockchains & the Future of Learning and Work

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Why Blockchain?

Blockchain has the potential to **fundamentally transform the ways in which individuals and systems interact** with one another in our society—particularly along dimensions of **privacy, authority, and trust**

Theory of Change

If we invest in **public infrastructure** to provide access to **self-sovereign, digitally verifiable records of learning**, then we can unlock significant opportunities for social and economic mobility

Education Blockchain Initiative

- Launched in partnership with the American Council on Education in February 2020, the Education Blockchain Initiative (EBI) explored novel applications of distributed ledger technologies like blockchain to address complex challenges in education.
- Understanding how blockchain technology can facilitate the secure, traceable, and verifiable exchange of educational data among institutions in the learning and employment ecosystem.



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Blockchain Innovation Challenge

The Blockchain Innovation Challenge made awards totaling \$900,000 to ecosystem-first designed approaches driving interoperability, social mobility, and learner control.

Finalists

- Lifelong Learner Project, Powered by Teachers (Utah)
- Student1 (Nebraska)
- UnBlockEd (University of Arizona and Georgia Institute of Technology)
- North Texas Collaborative (Texas)

Lifelong Learner Project (Utah)

Overview: The Lifelong Learner Project, Powered by Teachers, developed a digital wallet for teachers to store and access their credentials, licenses, and exemplars of practice and securely share them with entities such as state licensing systems, human resources departments, and learning management systems.

Ecosystem Members: The project is led by RANDA Solutions, in partnership with the Utah Department of Education, ETS, UPD Consulting, Utah State Board of Education, Digital Promise, BlockFrame, IdRamp, Velocity Career Network, Evernym, IMS Global, Credential Engine, and Fluree.

Student 1 (Nebraska)

Overview: A collaboration with the Nebraska Department of Education and Nebraska Department of Health and Human Services, to create comprehensive learner records for the one-third of all Nebraska K– 12 students who are involved with multiple state educational, judicial, or behavioral services.

Ecosystem Members: In addition to Student1 and the two state agencies listed above, other Nebraska state-level partners include Children and Family Services, Behavioral Health, Juvenile Court, Job Corp, and the Department of Correctional Services.

UnblockED (Arizona/Georgia)

Overview: Create an open transfer exchange system that will facilitate student progress towards graduation by making the transfer articulation processes more transparent. The project will empower students by leveraging the agency they gain through control of their learning records via the use of blockchain.

Ecosystem Members: led by the University of Arizona along with Georgia Institute of Technology, Fluree, and the John N. Gardner Institute.

North Texas Collaborative

Overview: To establish a consortium of institutions in the Denton, Texas, region that use a shared credentialing platform to allow students to store and share their educational records with colleges and employers. The purpose of this is to narrow the college graduation and the employment gap of underserved populations in North Texas.

Ecosystem Members: Partners include the Texas Woman's University, University of Texas-Arlington, Texas A&M University-Commerce, North Central Texas College, Carrollton-Farmers Branch Independent School District, and GreenLight.

Use Cases

Credentials, diplomas, records: owned and controlled by the learner-worker reduces fraud

Scholarship: establishing provenance of research and data, counter fraud and enable replicability

Finance: Disintermediating incentives and rewards and support for learning

Administration: Improving efficiency, effectiveness, and security of everyday transactions

Let's Stay in Touch!

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